Annex 6: Noise assessment baseline

1.1 INTRODUCTION

This annex sets out the baseline measurement methodology and a summary of relevant baseline conditions recorded. These measurements were in addition to those recorded in the HS2 Euston SES2 and AP3 ES baseline, published in September 2015.

1.2 BASELINE MEASUREMENT METHODOLOGY

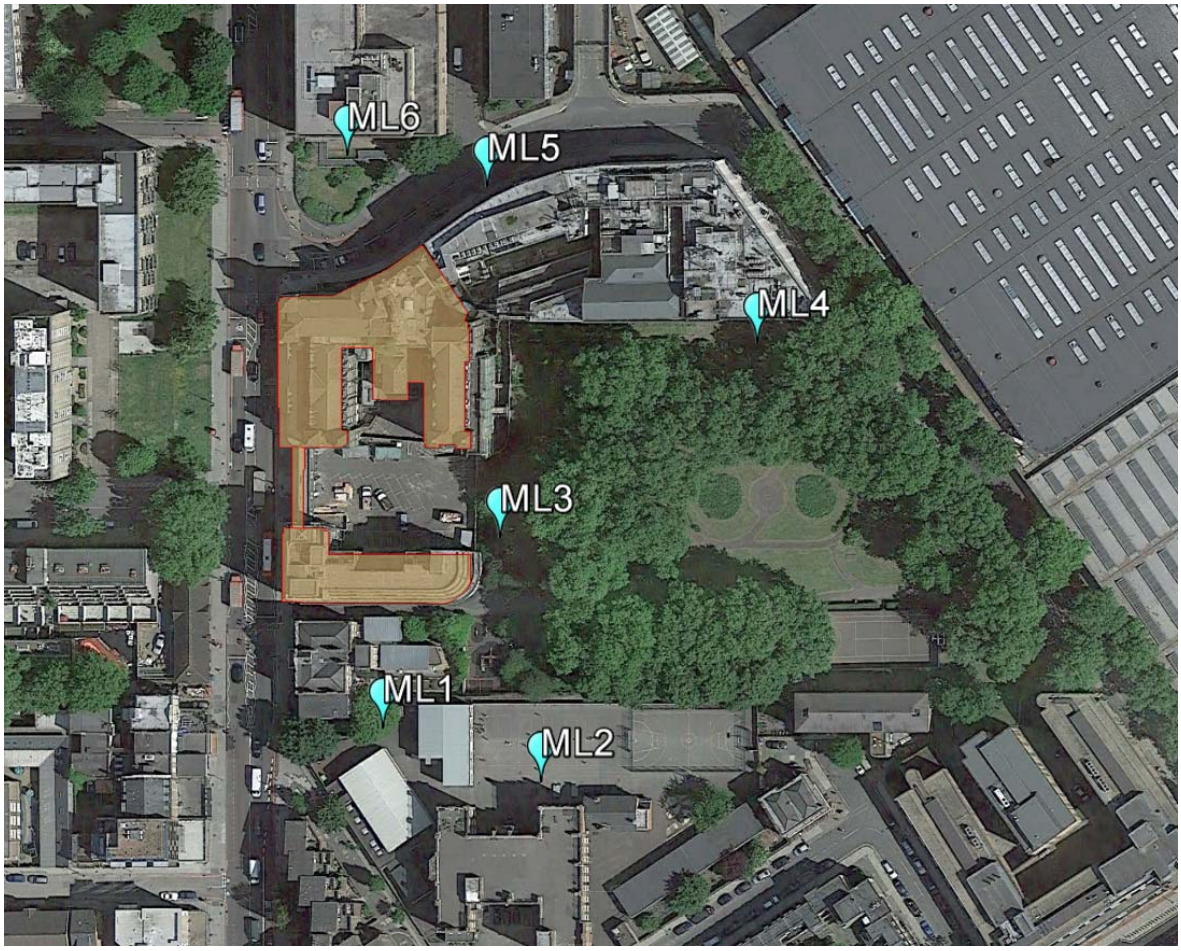
The baseline study consisted of operator attended measurements at Noise Sensitive Receptors (NSRs), between 1200 and 1530 on 8 April 2016 to measure the ambient noise levels within the study area.

Sampling locations were selected using aerial photography, maps and a site visit. The final decision was then made while in the field to determine the most suitable and representative location to deploy the monitoring equipment.

Free-field noise measurements were undertaken at six locations (ML1 to ML6). The measurement locations are shown in Figure 1. The duration of each measurement was 15 minutes. During the measurements the weather conditions were dry and the wind speed was lower than 5 m/s.

Two Rion NA-28 Sound Level Meters were used for the measurements. The instruments were calibrated before and after the measurements.

Figure 1 April 2016 Baseline Noise Survey Measurement



1.2.1 Noise Monitoring Results

The results for each measurement location are summarised in Table 1.

Table 1 April 2016 Baseline Attended Noise Monitoring Results

ID	Location	LAeq	LAmax	Noise Environment
ML1	Maria Fidelis School – Between the sports hall and the De Haut building	57	69	Primary noise source was traffic on Hampstead Road. Other sources included bird song and aircraft noise.
ML2	Maria Fidelis School – playground	51	62	Primary noise source was traffic noise from Hampstead Road. Aircraft noise was also audible.
ML3	St James's Gardens, Insull Wing north of the Margarete Centre	52	64	Primary noise source was trains idling at Euston station. Other sources included traffic noise from Hampstead Road and Cardington Street, bird song and aircraft noise.
ML4	Thistle Euston Hotel south façade	56	61	Primary noise source was trains idling at Euston station. Other sources included traffic noise from Cardington Street and bird song and aircraft noise.

ID	Location	LAeq	LAmax	Noise Environment
ML5	Thistle Euston Hotel north façade	65	75	Primary noise source was traffic on Cardington Street and Hampstead Road. Other sources included noise from trains idling at Euston station.
ML6	UCL – The Bartlett School of Architecture	62	69	Primary noise source was traffic on Hampstead Road. Noise from road works on Varndell Street was audible.

Although construction noise from the LB Camden replacement housing development at the corner of Hampstead Road and Robert Street was audible, it did not dominate noise levels, and the baseline noise levels measured are considered representative of typical daytime noise levels around the site.

In addition, data from the long term measurement site, LM 7027, on Hampstead Road, reported in the HS2 SES2 and AP3ES, was used to derive baseline noise levels for The Tarns and for the replacement housing being constructed on the corner of Robert Street and Hampstead Road. These are included in Table 1 in Annex 5.